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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,209	01/21/2004	Kia Silverbrook	MPA17US	1357
24011	7590	04/04/2006	EXAMINER	
SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN, NSW 2041 AUSTRALIA			UHLENHAKE, JASON S	
			ART UNIT	PAPER NUMBER
			2853	

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

A

Office Action Summary	Application No. 10/760,209	Applicant(s) SILVERBROOK ET AL.	
	Examiner Jason Uhlenhake	Art Unit 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03/03/2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 4, 6 are rejected under 35 U.S.C. 103(a) as being obvious over Silverbrook (U.S. Pat. 6,916,082) in view of Silverbrook et al (U.S. Pat. 6,609,787) and Volpe Jr. et al (U.S. Pat. 4,978,972).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing

that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Silverbrook ('082) discloses:

- ***regarding claim 1***, an electrical connector for connecting electrical signals to the at least two printhead integrated circuits (Column 2, Lines 33 – 38; Column 5, Lines 45 - 46)
- drive electronics incorporating at least one controller arranged to control the printing operation of a selectable number of the at least two printhead integrated circuits via the electrical connector (Column 5, Lines 7 – 18)
- casing in which the at least one printhead module and the drive electronics are removably mounted (Column 6, Lines 36 – 40)
- ***regarding claim 2***, wherein the at least one printhead module comprises one or more groups of two printhead integrated circuits and a single controller is selected for controlling each group of two printhead integrated circuits via the electrical connector (Column 5, Lines 7 – 11)
- ***regarding claim 3***, wherein the at least one printhead module comprises one or more groups of four printhead integrated circuits and a single controller is selected for controlling each group of four printhead integrated circuits via the electrical connector (Column 5, Lines 7 – 11)
- ***regarding claim 4***, wherein the at least one printhead module comprises one or more groups of eight printhead integrated circuits and a single controller is

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selected for controlling each group of eight printhead integrated circuits via the electrical connector (Column 5, Lines 7 – 11)

- **regarding claim 6**, at least on printhead module formed as a unitary arrangement of at least two printhead integrated circuits (Column 2, Lines 44 – 68)
- support member, at least one fluid distribution member mounting the at least two printhead integrated circuits to the support member (Column 2, Lines 55 – 62; Column 3, Lines 1 – 15), and an electrical connector (Column 2, Lines 35 – 38)
- the support member has at least one longitudinally extending channel (62 of Figure 1) for carrying the printing fluid for the printhead integrated circuits (Column 3, Lines 1 – 15), plurality of apertures extending through a wall of the support member arranged so as to direct the printing fluid from the at least one channel to associated nozzles in both , or if more than two, all of the printhead integrated circuits by way of respective ones of the fluid distribution members (Column 2, Lines 40 – 43; Column 3, Lines 1 – 15)

Silverbrook ('082) does not disclose expressly the following:

- **regarding claim 1**, at least one printhead module comprising at least two printhead integrated circuits, each of which has nozzles formed therein for delivering printing fluid onto the surface of print media, an elongate support member supporting the at least two printhead integrated circuits
- the at least one printhead module being removably mounted to the casing at the elongate support member

Silverbrook et al ('787) discloses:

- **regarding claim 1**, printhead module has nozzles (42) formed therein for delivering printing fluid onto the surface of print media, an elongate support member (14) supporting the at least two printhead integrated circuits (18) (Figure 5; Column 2 – Lines 1 – 6), for the purpose of providing an ink supply device for supplying ink to a printhead chip.

- the at least one printhead module being removably mounted to the casing at the elongate support member (Column 1, Lines 64 – 67; Column 2, Lines 1 – 3), for the purpose of replacing any defective modules.

Volpe Jr. et al discloses:

- **regarding claim 1**, at least one printhead module comprising at least two printhead integrated circuits (36) (Figure 2; Column 4, Lines 30 – 40; Claim 5), for the purpose of controlling the printhead modules.

At the time the invention was made it would have been obvious to a person of ordinary skill in the art to incorporate the teaching of at least one printhead module comprising at least two printhead integrated circuits, each of which has nozzles formed therein for delivering printing fluid onto the surface of print media, an elongate support member supporting the at least two printhead integrated circuits; the at least one printhead module being removably mounted to the casing at the elongate support member as taught by Silverbrook ('787) and Volpe Jr. et al into the device of Silverbrook ('082). The motivation for doing so would have been to provide an ink supply device for supplying ink to a printhead chip, the purpose of replacing any defective modules, and the purpose of controlling the printhead modules.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook (U.S. Pat. 6,916,082).

Silverbrook discloses the claimed invention except for the following:

- ***regarding claim 5***, the at least one printhead module comprises one or more groups of sixteen printhead integrated circuits and a single controller is selected for controlling each group of sixteen printhead integrated circuits via the electrical connector. It would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the at least one printhead module comprises one or more groups of sixteen printhead integrated circuits and a single controller is selected for controlling each group of sixteen printhead integrated circuits via the electrical connector, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art, for the purpose of improving the quality of printing. *St. Regis Paper Co. v. Bemis Co.*, 93 USPQ 8.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to incorporate the teaching of the at least one printhead module comprises one or more groups of sixteen printhead integrated circuits and a single controller is selected for controlling each group of sixteen printhead integrated circuits via the electrical connector as taught by Silverbrook. The motivation for doing so would have been to improve the quality of printing.

Response to Arguments

Applicant's arguments with respect to claims 1 - 6 have been considered but are moot in view of the new ground(s) of rejection. Please see the rejections regarding Silverbrook ('082), in view of Silverbrook ('787) and Volpe Jr. et al. The disclose an arrangement in which each module has more than one printhead chip mounted to a single elongate support member which is removably mounted to the casing of the printhead assembly

Silverbrook ('082) discloses at least one printhead module comprises one or more groups of eight printhead integrated circuits and a single controller is selected for controlling each group of eight printhead integrated circuits via the electrical connector, claim 5 discloses the use of one or more groups of sixteen printhead integrated circuits and a single controller is selected for controlling each group of eight printhead integrated circuits via the electrical connector. It has been held that mere duplication of the essential working parts of a device involves only routine skill in the art.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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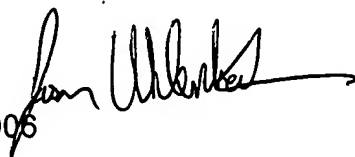
TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Uhlenhake whose telephone number is (571) 272-5916. The examiner can normally be reached on Monday - Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JSU
March 27, 2006




K. FIGGINS
PRIMARY EXAMINER